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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/579,216

05/12/2006

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EXAMINER

REDDY, KARUNA P

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

12/22/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/579,216	<b>Applicant(s)</b> FUKUMORI ET AL.	
	<b>Examiner</b> KARUNA P. REDDY	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This office action is in response to amendment filed 10/31/2008. Claims 2-3 are cancelled. Accordingly, claims 1 and 4-11 are currently pending in the application.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 103***

3. Claims 1, 4-8 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al (US 6, 472, 019 B1) in view of Di Giaimo (US 3, 496, 134).

The rejection is adequately set forth in paragraph 3 of office action mailed 7/31/2008 and incorporated here by reference.

4. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al (US 6, 472, 019 B1) in view of Di Giaimo (US 3, 496, 134) in view of Snyder (US 3, 617, 188).

The rejection is adequately set forth in paragraph 4 of office action mailed 7/31/2008 and incorporated here by reference.

### ***Response to Arguments***

5. Applicant's arguments, filed 10/31/2008, with respect to prior art rejections in paragraphs 3-4 of office action mailed 7/31/2008, have been fully considered but they are not persuasive. Specifically, applicant argues that (A) the 37 CFR 1.132 Declaration

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submitted demonstrates that use of a combination of epoxy compound and at least one weakly basic compound as HCl trapping compound provides for superior properties; (B) applicant believes that the examples 1-10 are representative of the scope of present claims.

With respect to (A), it is noted at the outset that HCl trapping compound is used to trap HCl produced by chloride containing monomer in the copolymer of present claims, and properties exhibited by the aqueous dispersions are thus dependent on the chloride content present in the chloride containing monomer. Given that, examiner's comments are directed to those dispersions containing the same chloride containing monomer in similar amounts in both inventive and comparative examples. For the sake of convenience, data from declaration which meets these criteria is presented below -

Component	IE 1	IE 2	IE 5	IE 6	IE 8	CE 4	CE 5	CE 6	CE 7
FA	150 g	150 g	150 g	150 g	150 g	150 g	150 g	150 g	150 g
Vinyl chloride	40 g	40 g	40 g	40 g	40 g	40 g	40 g	40 g	40 g
Non-ionic emulsifier	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Epoxidized soybean oil	10 g	10 g	10 g	10 g	10 g	10 g	10 g	10.7 g	0 g
Sodium hydrogen carbonate / Sodium Carbonate	0.7 g	0.7 g	1.5 g	0.7 g	0.9 g	0.7 g	0.7 g	0 g	10.7 g
H <sub>2</sub> O repellency (Initial)	5	5	5	5	4	5	5	5	4
Oil repellency (Initial)	5	4	4	4	3	5	5	5	3
H <sub>2</sub> O repellency (1 month at 50°C)	5	5	5	5	4	4	4	4	4
Oil repellency (1 month at 50°C)	4	4	4	4	3	3	3	3	3
Storage stability	Good	Good	Good	Good	Good	Good	Good	Good	Good
Mechanical stability	Good	Good	Good	Good	Good	Fair	Fair	Fair	Good
Chemical Stability	Good	Good	Good	Good	Fair	Fair	Fair	Fair	Poor
Yellowing	Good	Good	Good	Good	Good	Good	Good	Good	Good

As can be seen from the data, comparative examples 4-6 exhibit similar storage stability, chemical stability, yellowing, water and oil repellency after one month at 50°C; better initial oil and water repellency; while exhibiting only a slightly poor mechanical stability.

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Thus, it is clear from the data submitted that comparative examples 4-6 exhibit superior properties on more counts than at least the inventive example 8. Therefore, applicant's argument that use of a combination of epoxy compound and at least one weakly basic compound provides for superior properties is without merit.

With respect to (B), while examples showing supposedly superior properties are presented only for one chlorine-containing polymerizable compound, one polymerizable compound having a perfluoroalkyl or perfluoroalkenyl group and one methacrylate group containing monomer in both inventive and comparative examples, present claims are directed to a broad genus for perfluoroalkyl or perfluoroalkenyl group containing monomer, chlorine-containing monomer and methacrylate group containing monomer. Thus, it is the examiner's position that data submitted is not commensurate with scope of present claims.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KARUNA P. REDDY whose telephone number is (571)272-6566. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. P. R./  
Examiner, Art Unit 1796

/Vasu Jagannathan/  
Supervisory Patent Examiner, Art Unit 1796